

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
27 January 2005 (27.01.2005)

PCT

(10) International Publication Number  
WO 2005/007903 A1

(51) International Patent Classification<sup>7</sup>: C22B 11/06, 1/08

(21) International Application Number:

PCT/CA2004/001067

(22) International Filing Date: 20 July 2004 (20.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
2,435,779 22 July 2003 (22.07.2003) CA  
60/489,904 25 July 2003 (25.07.2003) US

(71) Applicant (for all designated States except US):  
RESSOURCES MINIERES PRO-OR INC. [CA/CA]:  
400 Rue St-Jacques, Suite 200, Montreal, Quebec H2Y  
1S1 (CA).

(72) Inventors; and  
(75) Inventors/Applicants (for US only): BERGERON,  
Mario [CA/CA]; 1253 de Fenouillet, Cap-Rouge, Quebec  
G1Y 2Y6 (CA). RICHER-LAFLECHE, Marc [CA/CA];  
1303 Rue De Chamby, Sainte-Foy, Quebec G1W 3Y8  
(CA).

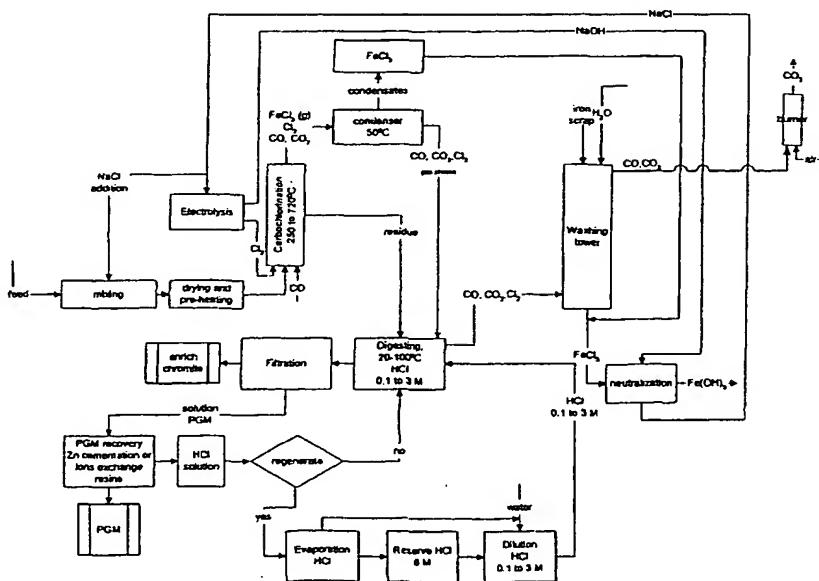
(74) Agents: DUBUC, J. et al.: Goudreau Gage Dubuc, Stock Exchange Tower, 800 Place Victoria, Suite 3400, P.O. Box 242, Montreal, Quebec, H4Z 1E9 (CA).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*[Continued on next page]*

(54) Title: A PROCESS FOR RECOVERING PLATINUM GROUP METALS FROM ORES AND CONCENTRATES



WO 2005/007903 A1

(57) Abstract: A method for recovering at least one platinum group metal (PGM) species from a feed product selected from the group consisting of chromite ore, chromite ore concentrate and PGM concentrate comprising the steps of: mixing the feed with at least one salt so as to produce a mixture, whereby the concentration of salt in the mixture is sufficient to convert at least one PGM species into a corresponding PGM chloride salt; and contacting the mixture with gaseous chlorine and CO at a temperature between about 240°C and 800°C to induce the conversion of at least one species of PGM into a corresponding PGM chloride salt, whereby said chloride salt of at least one PGM species can be recovered.



**Published:**

— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*